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ABSTRACT

A study, based on the assumption that communicative effectiveness can be learned, was conducted in order to specify the dimensions underlying interpersonal competence from a message-centered viewpoint and to develop an interpersonal competence instrument. Fifty-eight questionnaire items, 40 of which related to the components of interpersonal competence, were administered to two large groups of university freshmen (467 total). Four reliable components of effective communication were identified through the use of factor analysis: empathy, concern for completion of a task, need for achievement, and tendency to be highly active. Further research is needed to complete the characterization of the competent communicator. (MAI)

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THE CALIFORNIA INTERPERSONAL COMPETENCE QUESTIONNAIRE - I:

AN EXPLORATORY SEARCH FOR FACTOR STRUCTURE

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THE CALIFORNIA INTERPERSONAL COMPETENCE QUESTIONNAIRE - I:

AN EXPLORATORY SEARCH FOR FACTOR STRUCTURE

The term interpersonal competence has been defined over the years in many ways. Such terms as "personal effectiveness," "social competence," "interpersonal (or social) effectiveness," "conversational ability," and "communicative competence" have all been used to refer to roughly the same phenomenon. A major benefit to be derived from these independent attempts to define competency may be found in the identification of areas of agreement as to what dimensions underlie effective communication behavior.[1]

One of the earliest empirical treatments of interpersonal competence was reported by Phillips' study of effective conversation.[2] Subjects were drawn from a sample of 1300 students enrolling at Stephens College, Columbia, Missouri. Following an interview with a communications instructor, each subject was rated on conversational ability by the instructor and by other subjects that qualified as close acquaintances. Results of analysis of a twenty-one item conversational success scale showed that good conversation occurred when the atmosphere was conducive to conversation. Such items as "I felt free to express my opinion, "They were friends of mine," "They included me in the conversation," "We were all very frank and sincere," and "Other people seemed interested in what I had to say," indicated the importance of the quality of member relations to the perceived success of the interaction.

Another field study by Campbell and Yarrow investigated the perceptual and behavioral correlates of social effectiveness.[3] 260 pre-adolescent children attending summer camps served as research subjects. Black and white boys and girls from low-income families living in greater Washington were assigned to 32 cabin groups of from six to ten members, and were interviewed over a period of two weeks by trained observers. A social effect criterion measure was defined by general feelings of like or dislike which the child inspired in his peers, and peer expectations about the child regarding social effect behaviors (e.g., valuable social actions such as nurturance, congeniality, and responsibility). Results suggested that the quality of interaction, rather than content, is related to social effectiveness. The socially effective child demonstrated an ability to advance inferential hypotheses about interpersonal relationships, organize his conception of the social world more clear[illegible]nd exhibit patterns of behavior that indicated greater freedom of acti

Farber's factor analysis of the competency construct provided an even more rigorous examination of the perception-behavior relationships advanced in the Campbell study.[4] Responses of 495 husbands to a 104 item questionnaire designed to measure competency in interpersonal relations were submitted to centroid factor analysis in conjunction with the varimax procedure for generating orthogonal factors. Following designation of unities as estimates of communalities, analysis produced 34 factors with a latent root greater than unity, 11 of which constituted a measure of competency. As anticipated, perceived empathy, autonomy, and resourcefulness emerged as orthogonal factors accounting for the greatest proportion of response variances. The general

factor of perceived empathy included such items as, "How often does your mate seem unsympathetic to your feelings?" "How often does your mate fail to know what you expect of her?" and "How much of your innermost feelings and thoughts do you confide in your mate?" Additional factors obtained included tested empathy, cooperativeness and supportiveness, as well as various sub-categories of the first three factors. Results were interpreted as supportive of the earlier conceptualizations of Foote and Cottrell.

In a somewhat different vein, Ring, et. al., proposed a typology of three performance styles in interpersonal relations, labeled p, r, and o.[5] Category (or performance style) p refers to an individual who dislikes and prefers to avoid interpersonal contexts which call for acting or playing out a role. An r is a person who is typically skilled in interpersonal relations, and is therefore operationalized as the most 'competent' performance style. Type c represents a tendency to become whatever a particular situation calls for; i.e., conventional role-playing. Performance style test items for category r include: "If given the chance I would make a good leader of people;" "I have skill in influencing others;" "I must admit that I enjoy trying to manipulate others for my own purposes;" and "It's usually easy for me to persuade others to my own point of view." Although these items constitute measures of manipulation they are considered relevant to the dimension of control implied in most treatments of interpersonal competence.

An extensive application of Foote and Cottrell's proposed dimensions of health, intelligence, empathy, autonomy, judgement, and creativity was reported by Holland and Baird.[6] A twenty item Interpersonal Competency (IC) Scale was administered along with other scales to 12,432 college freshmen, (6,289 males,

6,143 females) to determine the relationship between the IC and various assessments of psychological strength. Examples of IC items include: "I have a reputation for being able to cope with difficult people;" "I find it easy to talk with all kinds of people;" "People seek me out to tell me about their troubles;" and "If I want to, I can be a very persuasive person." Results of concurrent correlations between IC and American College Survey Data demonstrated significant relationships for all tests ($p. < .001$) due to the large sample. In general, the data suggest that a high IC scorer sees himself as a sociable, popular, persuasive, and energetic individual who expects to become influential in community affairs. In addition, he reports that he has many social, persuasive, and artistic competencies, and that he comes from a family which provided intellectual stimulation. The highest predictive relationship between IC scores and student self-reports was found, again, for popularity, physical energy, expressiveness, sensitivity to others, social participation, and leadership. Results provided some support for construct and predictive validity, but did not sufficiently explicate the complexity of the concept under study.

McCroskey's development of four scales to measure communication apprehension represents an attempt to quantify, in this case, interpersonal (or communicative) incompetence.[7] The first of these scales, the PRCA-College instrument, was intended as a general measure of communication apprehension across various social contexts. The PRCA-Ten and PRCA-Seven were developed to measure communication anxiety among high school (tenth grade) and junior high (seventh grade) age subjects. Both instruments were based upon the results of the original PRCA-College Inventory. The fourth scale, PRPSA, was specifically adapted from

a measure of test anxiety to assess public-speaking apprehension. Results of several reliability and validity checks indicate that the first and fourth scales demonstrate consistent relationships, while further application of the PRCA-Ten and PRCA-Seven is currently being conducted.

Based upon earlier attempts to measure aspects of marital communication, Bienvenu constructed a 54-item Interpersonal Communication Inventory.[8] This instrument explored, among other things, an individual's ability to listen, to empathize, to understand, to handle angry feelings, and his ability to express himself. Twenty items were found to discriminate between "good" and "poor" communicators. Results suggested that effective communication was related to healthy self-concept, listening ability, clarity of expression, coping with anger, and self-disclosure.

Two additional instruments were reported shortly after publication of the Bienvenu inventory. Kline and Van Graber made use of the UNM Conversation Self-Report Inventory developed by the Department of Speech at the University of New Mexico.[9] The UNM instruemnt attempts to discriminate between two patterns of communication, namely, concern for persuasion, and concern for sensitivity. The second pattern is characterized by skills related to perception of the other, prediction of the other's behavior, and the assumption of the appropriate role with relation to that behavior. Rossiter, et. al., later constructed the Interpersonal Communication Effectiveness Checklist to discriminate differences between three types of communicators, when both similar and dissimilar others are being rated.[10] The results of five studies suggested that: 1) the ICEC is unidimensional; 2) the factor structure of the ICEC is fairly stable; 3) ICEC scores correlate positively with global interpersonal

effectiveness rankings; and 4) ICEC scores correlate negatively with McCroskey's PRCA ratings.

More recently, Yerby and Bochner present empirical evidence for a proposed relationship between interpersonal competence and learning outcome.[11] A total of four predictor measures were identified as potential influences upon interpersonal skills acquisition: demographic variables, intellectual predictors, perception of leader behavior, and interpersonal and group competence. The latter factor was measured by the GAIT instrument developed by D'Augelli.[12] Principle components analysis of these scales generated two factors accounting for 62% of the variance: Interpersonal Openness (I); and Acceptance/Flexibility (II). Statistical tests for significant learning differences between experimental treatments showed that cognitive achievement was affected by learner's previous record of achievement, class standings, and degree of acceptance/flexibility skills. More importantly, S's who experienced high empathy in their group facilitators scored higher on interpersonal performance (competence) than those who experienced less empathy. Among the leader behaviors measured, only empathy made a difference in learning outcomes.

Crowley and Ivey's investigation of the dimensions underlying effective interpersonal communications provides additional support for the trends found by Yerby and Bochner.[13] Factor analysis of responses obtained from an interpersonal process scale yielded 20 factors that accounted for 81% of the total variance. Analysis of variance confirmed that direct, mutual communication is most easily identified in S's who employ self- and/or partner references in the context of words connoting emotional affect. Specifically, successful attempts to enhance effective interpersonal communication were linked to each

dyad's openly sharing feelings about themselves, each other, and the relationship.

Weimann proposed a model of communication competence composed of five dimensions: affiliation/support (A/S); social relaxation (SR); empathy (E); behavioral flexibility (F); and interaction management (IM).[14] Based upon a review of the published literature, an instrument consisting of 57 Likert-type items was created and pre-tested. The revised questionnaire was made up of 36 items designed to measure each of the five dimensions proposed. Results of factor analysis indicated that S's viewed communicative competence as being composed primarily of a single factor. Items loading highest on this general factor included "listens to what people say" and "is sensitive to the needs of others."

Taken together, these empirical investigations strongly suggest the existence of a general competency factor: empathy. Bochner and Kelly, however hypothesize the existence of additional factors, including goal achievement, self-disclosure, ownership of feelings and ideas, descriptive feedback, and behavioral flexibility.[15] Thus, there appears to be a disparity between theoretic conceptualizations of interpersonal competence and recent empirical findings.

One reason for this lack of agreement may be the assessment techniques employed by competence researchers. That is, the lion's share of these studies have centered upon the relative health of interpersonal relationships rather than the specification of external behavioral referents by which the competent communicator may be identified. The purpose of the present study was to specify the dimensions underlying interpersonal competence from a

distinctly message-centered view point. In this manner, competent communication may be more reliable characterized, thereby facilitating independent replication.[16]

METHOD

Based upon the theoretical formulations proposed by Bochner and Kelly, 58 questionnaire items were created.[17] 40 of the items were written specifically around one of the ten dimensions proposed in that article as a major component of interpersonal competence: diagnosis, effectuation, goal achievement, collaboration, adaptability, empathy, self-disclosure, ownership, feedback, and behavioral flexibility. The remaining 18 were conceived around categories of incompetence as a manipulation check (e.g., shy, embarrassable). Each item was designed to conform to a Likert-type, five-interval scale; all items were phrased in a positive manner to increase the likelihood of discrimination among variables by respondents. See Table 1.

TABLE 1 HERE

The first sample consisted of 286 subjects selected from students enrolled in an introductory interpersonal communication course at a midwestern university. The second sample was made up of 201 students enrolled in an introductory mass communication course at the same university. All subjects were instructed to rate each item according to its importance to "effective interpersonal communication."

Each data set was subjected to principal factors analysis, followed by varimax rotation. An eigenvalue of 1.0 was used to regulate factor extraction. Items with loadings $>.50$ were retained. Three or more satisfactorily loading variables were required to define a factor. To determine structural

reliability, factor comparison techniques were invoked.[18]

RESULTS

To ensure that the analyses did not yield randomly composed factors, Bartlett's test of sphericity was applied to both intercorrelation matrices. A significant chi-square ($p < .001$) was obtained for both of the samples. Five factors which cumulatively accounted for 35% of the total variance were extracted. A sixth factor included no satisfactorily loading variates, and was omitted from the analysis. Factor names and relative contributions to total variance were: Empathy (20%); Task Completion (5%); Need for Achievement (5%); Activity (4%); and Physical Attractiveness (2%).

Subjects enrolled in the mass communication courses yielded similar results. Although seven factors had eigenvalues which exceeded 1.0, only four factors satisfied the minimum number of variables criterion. Components of this solution, which accounted cumulatively for 35% of the total variance, were: Empathy (19%); Task Completion (8%); Need for Achievement (4%); and Activity (4%). Table 2 provides further detail.

TABLE 2 HERE

Four criteria were employed to assess the stability of the factor structures across samples: 1) variance; 2) number of factors; 3) communality; and 4) configuration-complexity. In terms of total variance, there appears to be a high degree of articulation between the two structures. Utilizing the eigenvalue-one criterion, factors extracted in the first analysis cumulatively accounted for 38% of the total variance. For the second sample, 42% of the total variance was represented in the final solution. In order to assess the similarity of the two unrotated matrices with regard to variance accounted for, a

Pearson product-moment correlation coefficient was calculated based upon the first six factors extracted. The resulting correlation exceeded .99 significant at the .001 level.

Six factors had eigenvalues >1.0 in the first analysis, while seven factors met this criterion in the second sample. However, there exist several methods of factor extraction, and an extensive literature is devoted to the number of factors problem. Application of the scree test revealed different solutions than did the eigenvalue-one criterion. Six factors would have been extracted from the first analysis, while only five factors would have used for the second sample. When several eigenvalues cluster about 1.0, discontinuity analysis is sometimes employed.[20] Much like the scree test, it involves a visual examination of the data to determine the point at which gradual decline terminates and a sharp dropoff occurs. For the first solution, seven factors precede a sharp decline. Eight factors in the second analysis would be retained, according to the discontinuity criterion. In summary, there appears to be some similarity based upon number of factors; however, different relationships between the two solutions corresponding to varying criteria raise questions concerning the adequacy of the original array of input variables.

The degree to which an input variate contributes to the final factor structure is termed the "communality" of the variable. By comparing the final communality estimates from each solution, another measure of factorial invariance was obtained. The final communality estimates of all 58 items were correlated across samples, yielding a significant $\underline{r}$ of .96 ($p < .001$).

The configural fit of two matrices provides a characterization of the pattern and magnitude-similarity between the two structures. One approach to this

issue is visual inspection. Figure 1 presents a plot of the factor score estimates for both samples.[21] The data were subjected to a positive linear transformation for this purpose.

FIGURE 1 HERE

The high degree of comparability, not only in terms of factors extracted but also in the case of factor loadings, confirms the indications of prior examinations. A second method of assessing fit is direct vector or matrix comparison. One such method, developed by Schonemann and Carroll,[22] yields a matrix analog of R^2. This program was run using the first four factors; an R^2 of .6045 was obtained. For the first six factors, a slightly lower figure of .55 was calculated. This measure of pattern- and magnitude- similarity lends further confirmation to the results of the earlier analyses.

DISCUSSION

This investigation has yielded four reliable components. The competent communicator is perceived to express a high degree of empathy, demonstrate a strong concern for completing the task at hand, and exhibit leadership qualities. The communicatively effective individual is also regarded as a highly active person. While there are some indications that interpersonal attractiveness contributes to perceived competency, further empirical evidence is required to assess its relative impact.

These findings provide partial support for the theorizing of Bochner and Kelly concerning interpersonal competence.[23] The primary factor included items relating to empathy, self-disclosure, and receptivity to feedback. The last two constructs are represented by the following statements: "is willing to listen to what others say;" "is authentic and honest;" and "is a good listener."

The consistent emergence of the Empathy factor confirms the earlier predictions of Phillips,[24] Farber,[25] Holland and Baird,[26] Bienvenu,[27] and Yerby and Bochner[28] as well. These investigators hypothesized that the competent individual would frequently engage in empathic communicative behavior. Factors two and three, Task Completion, and Need for Achievement, articulate well with Bochner and Kelly's goal orientation.[29] Items such as "is the kind of person who gets things done," "seems to be in control," and "emerges as a leader in social contexts" typify the person who successfully sets and accomplishes his or her objectives.

The fact that only 35% of the total variance was explained by the first four factors constitutes the most serious limitation of this study. It is probable that additional variables are required in order to reveal the underlying structure of interpersonal competence. Further attempts to operationalize this construct must include a much broader input array if they are to yield an adequate solution. The dimensions of perceived attractiveness,[30] social relaxation,[31] communication apprehension,[32] and acceptance,[33] described in previous research, may provide future investigations with additional resources from which to generate questionnaire items.

A second limitation of these findings concerns the construction of specific questions used in the inventory. In an attempt to generate a behavioral message-centered focus, some test items were included which do not relate directly to generally observable behaviors. None the less, a few of these items loaded satisfactorily on one or more of the factors (e.g., "seems to be in control"). This underscores the need to generate similar items which more adequately represent the behavior of the competent communicator, as well as

the behavioral responses he or she elicits from the social environment.

CONCLUSION

This exploratory investigation was based on the assumption that communicative effectiveness can be learned. The primary goal was to establish a strong foundation for the specification of effective communication behaviors and the development of an interpersonal competence instrument. Future research employing a similar message-centered approach will help to complete the characterization of the competent communicator. Once the essential dimensionality of the interpersonal competence domain has been determined, empirically supported behavioral objectives may be identified.

FOOTNOTES

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1. In the effort to concentrate upon data-based investigations of interpersonal competence, several important conceptual treatments have been purposely excluded. The reader may refer to the following sources for further consideration: N.N. Foote and L.S. Cottrell, Jr., Identity and Interpersonal Competence (Chicago: University of Chicago Press, 1955); R.W. White, "Motivation Reconsidered: The Concept of Competence," Psychological Review, 66, 5 (1959), 297-333; C. Argyris, Interpersonal Competence and Organizational Effectiveness (Homewood, Ill.: Irwin-Dorsey, 1962); M. Argyle, Social Interaction (Chicago: Aldine Atherton, 1969); E.A. Weinstein, "The Development of Interpersonal Competence," in D.A. Goslin (ed.), Handbook of Socialization Theory and Research (Chicago: Rand-McNally, 1969), 753-819; J. Habermas, "Toward a Theory of Communicative Competence," in H.P. Dreitzel (ed.), Recent Sociology (New York: Macmillan, 1970), No. 2; D. Hymes, On Communicative Competence (Philadelphia: University of Pennsylvania Press, 1970); R.O. Washington, "Toward a Theory of Social Competence: Implications for Measuring the Effects of Head Start Program," Urban Education, 10 1 (1975), 73-85.

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15. A.P. Bochner and C.W. Kelly, "Interpersonal Competence: Rationale, Philosophy, and Implementation of a Conceptual Framework," Speech Teacher, 23, 3 (1974), 279-301.

16. See B. Lashbrook, D. Gouran, A. Fisher, E.G. Bormann, R. Cathcart, and G.R. Miller, "Small Group Research: Propositions and Perspectives," Program at the 1970 Speech Communication Association Convention, New Orleans, Louisiana.

17. Bochner and Kelly.

18. For a detailed discussion of the criteria by which these decisions were made, see: R.K. Tucker and L.J. Chase, "Factor Analysis in Human Communication Research," an invited paper presented at the annual meeting of the International Communication Association (Chicago: April 1975); S.A. Mulaik, The Foundation of Factor Analysis (New York: McGraw-Hill, 1972); R.J. Rummell, Applied Factor Analysis (Evanston, Ill.; Northwestern University Press, 1970); and H.H. Harman, Modern Factor Analysis (Chicago: University of Chicago Press, 1967).

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245-255. See: B. Behrman and D. Roberts, HYPERSPACE Program, California State University Computer Center, Sacramento, California.

23. Bochner and Kelly.

24. Phillips.

25. Farber.

26. Holland and Baird.

27. Beinvenu.

28. Yerby and Bochner.

29. Bochner and Kelly.

30. J.C. McCroskey and T. McCain, "The Measurement of Interpersonal Attraction," Speech Monographs, 41 (1974), 261-266.

31. Weimann.

32. McCroskey.

33. Yerby and Bochner.

TABLE 1

1. sets his/her own goals and follows them through.
2. seems to initiate a good deal of the conversation in social settings.
3. tends to listen a good deal to others, but doesn't talk too much.
4. strikes me as a well-organized person; one who has it "together".
5. gives other people a lot of feedback about how he feels about them.
6. is willing to listen to what others say about him/her.
7. tends to be supportive of other people; he/she seems to want to "help".
8. seems to understand how other people are feeling.
9. is an open person; reveals his/her inner self to others when appropriate.
10. is very fair.
11. shows personal warmth to others
12. is physically attractive.
13. seems to like him/her self
14. seems able to adapt to new situations comfortably.
15. has the ability to have an affect on other people.
16. is able to accurately analyze different kinds of human problems.
17. is dynamic in the sense that he/she communicates in an animated fashion.
18. is very intelligent.
19. is able to express ideas clearly.
20. has a very positive outlook.
21. appears to be a decent, moral person.
22. is "authentic" and honest.
23. treats people as equals.
24. takes responsibility for his/her own ideas and actions.
25. is very aggressive in social situations.

26. has a very logical mind.

27. is openly emotional.

28. demonstrates credibility and trustworthiness.

29. is a strong person.

30. is an excellent competitor.

31. is able to persuade others to his/her point of view.

32. will stick to his/her point of view.

33. is good at problem-solving.

34. is able to receive new information that is contrary to his/her values.

35. is an impressive figure, in the physical sense.

36. is a risk-taker.

37. emerges as a leader in social contexts.

38. is a very "natural" person.

39. would rather get involved in conflict than avoid it.

40. is the kind of person who gets things done.

41. is very sensitive to the needs of others.

42. is a very good listener.

43. is not intimidated by changes in everyday patterns.

44. is not afraid to show affection.

45. is quite unpredicable.

46. is very consistent with him/herself.

47. seems to be in control of his/her own destiny.

48. is always interested in how I feel about him/her.

49. is easy to talk to.

50. is easily embarrassed.

51. is rather shy.

52. is rather quiet.

53. is a gentle person.

54. is very mature.

55. is quite impulsive.

56. is a mysterious person.

57. is a very successful person.

58. seems concerned about the state of world affairs.

TABLE 2

ROTATED FACTOR MATRICES FOR

STUDIES 1 and 2

Variable	Factor I	Factor II	Factor III	Factor IV
1	00, 13	45, 42	05, 07	11, 05
2	03, 07	10, 10	32, 32	37, 33
3	21, 43	23, 04	08, 07	10, 26
4*	14, 41	54, 52	03, 03	08, 03
5	20, 06	05, 05	25, 31	04, 12
6*	54, 66	27, 17	01, 09	06, 09
7*	58, 36	17, 08	02, 01	06, 06
8*	59, 63	11, 15	05, 01	03, 01
9*	56, 30	02, 07	16, 09	16, 21
10*	55, 60	40, 21	13, 17	02, 07
11*	67, 54	01, 05	12, 06	06, 03
12	11, 15	09, 01	02, 17	04, 19
13	18, 07	25, 28	05, 08	25, 02
14	17, 28	46, 27	24, 25	04, 24
15	15, 12	45, 30	28, 34	08, 13
16	44, 41	36, 48	10, 26	01, 05
17	08, 12	18, 23	32, 42	07, 05
18*	16, 19	69, 60	07, 14	01, 12
19*	23, 17	50, 52	12, 01	16, 17
20	44, 33	44, 40	01, 18	12, 16
21	36, 31	40, 34	19, 10	01, 04
22*	52, 61	47, 41	08, 15	03, 05
23*	56, 56	21, 16	13, 21	04, 07

23*	56, 56	21, 16	13, 21	04, 07
24	49, 31	41, 25	08, 10	14, 01
25*	01, 11	05, 19	68, 52	12, 26
26*	24, 20	57, 62	03, 22	02, 00
27	32, 11	21, 03	33, 22	03, 05
28*	54, 47	42, 53	07, 13	12, 08
29*	21, 05	58, 61	10, 11	07, 06
30	05, 11	45, 47	35, 23	05, 05
31	15, 00	33, 27	25, 42	03, 11
32	13, 06	28, 26	13, 27	01, 08
33*	18, 37	61, 54	00, 03	14, 01
34*	59, 53	22, 40	08, 01	09, 04
35	12, 09	25, 21	03, 26	36, 12
36*	21, 12	05, 06	54, 54	04, 02
37*	01, 01	28, 17	52, 52	06, 11
38	46, 40	13, 13	17, 05	06, 05
39	11, 04	16, 13	35, 40	06, 37
40*	22, 22	54, 71	10, 04	05, 02
41*	74, 70	11, 20	03, 10	05, 15
42*	73, 75	25, 25	10, 18	10, 10
43	40, 10	36, 44	17, 10	05, 03
44*	54, 35	04, 11	31, 03	07, 04
45	04, 21	07, 13	44, 40	41, 11
46*	27, 11	46, 50	00, 04	00, 08
47*	27, 04	57, 67	03, 08	07, 14
48*	50, 22	17, 14	03, 10	05, 40

49*	45, 56	10, 08	14, 05	07, 02
50*	07, 04	08, 10	12, 05	43, 59
51*	06, 03	02, 06	13, 19	75, 75
52*	04, 15	03, 04	21, 20	74, 74
53*	49, 57	13, 12	10, 12	27, 27
54*	29, 30	54, 31	04, 01	05, 13
55*	10, 00	22, 09	32, 51	16, 32
56	03, 22	04, 18	24, 35	33, 39
57*	21, 18	55, 56	07, 09	00, 11
58	10, 24	46, 42	02, 09	07, 05
EIGENVALUES:	11.52	3.03	2.76	2.07
	11.20	4.34	2.53	2.21
CUMULATIVE % OF TOTAL VARIANCE:	20, 19	25, 27	30, 31	33, 35

FIGURE 1

Summed Factor Scores Estimates Across Both Samples
(I=Interpersonal; M=Mass): Transformed Data